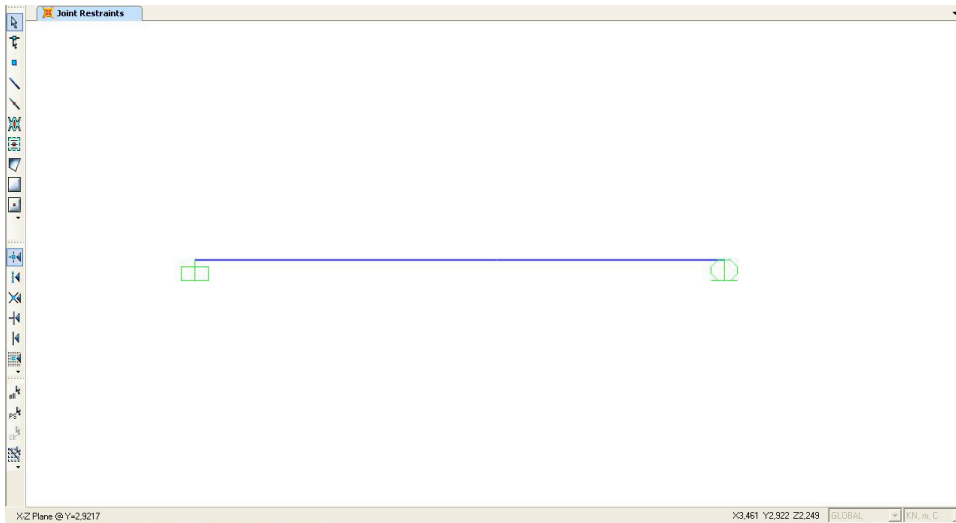


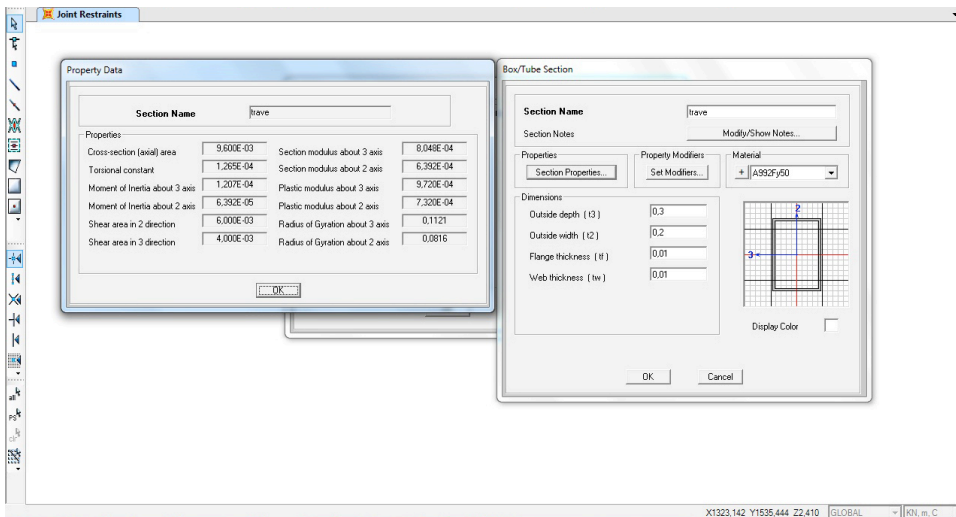
# ESERCITAZIONE LINEA ELASTICA SAP2000

Disegnare una trave lunga 5 m divisa nel punto in cui lo spostamento è massimo ( $0,57L = 2,85$  m) e assegnare i vincoli.

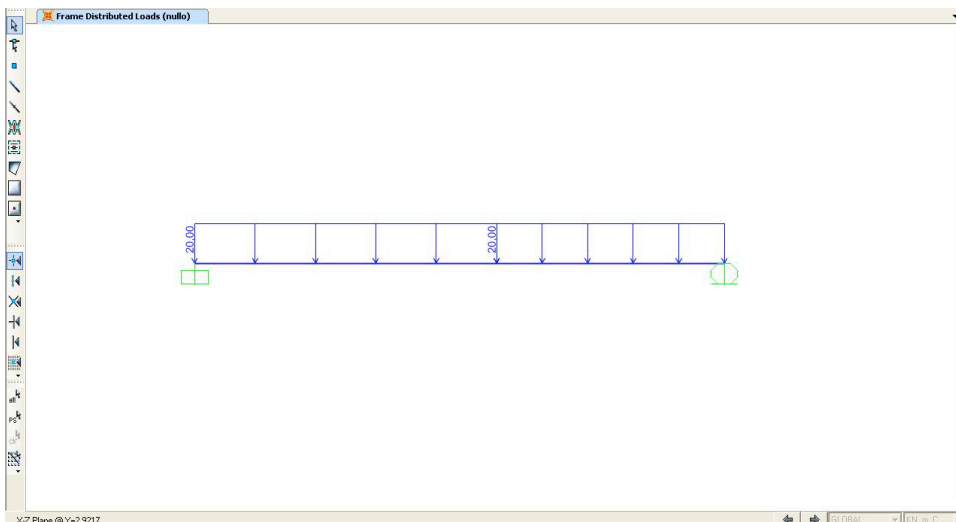


Assegnare il peso nullo: Define\_Load patterns

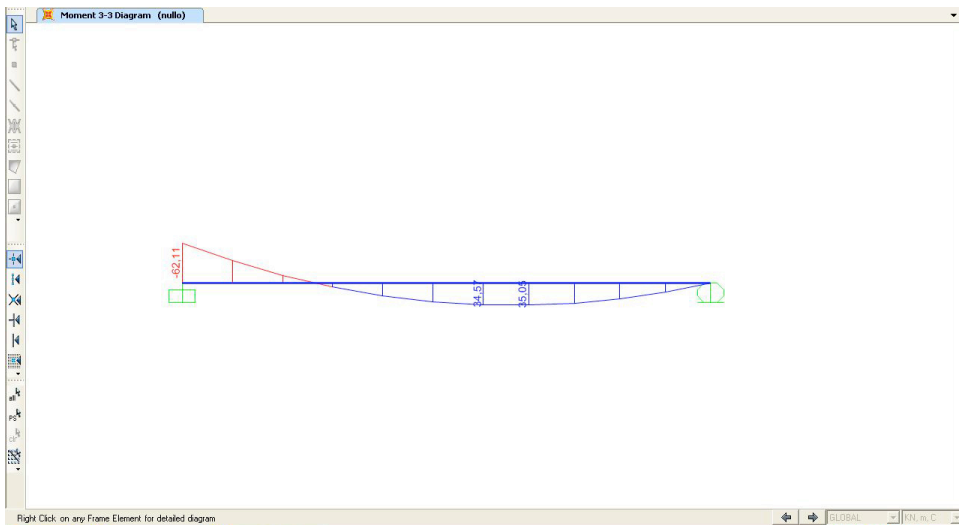
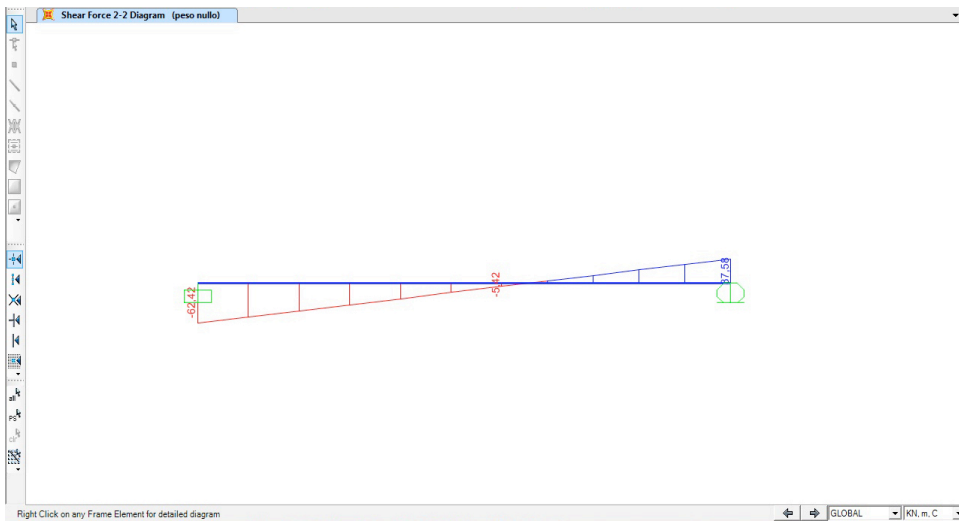
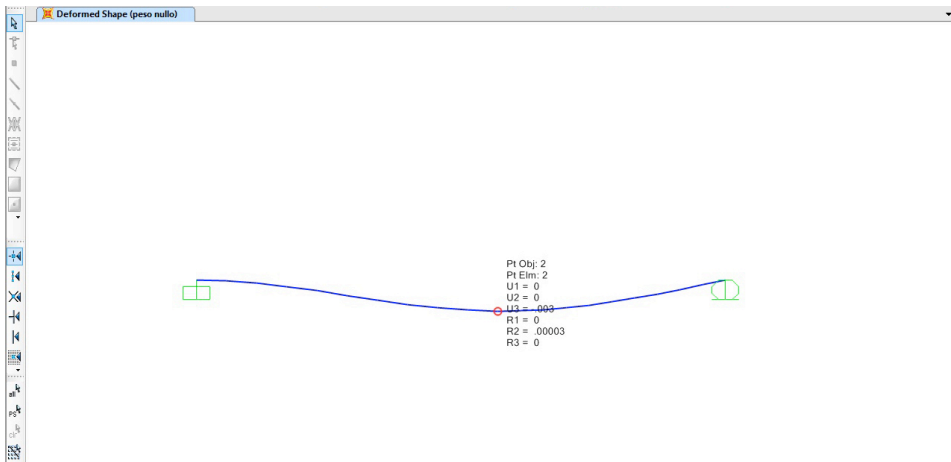
Definire il materiale e la forma della trave: Define\_Frame section, e assegnarli



Assegnare un carico distribuito pari a 20KN: Assign\_Frame loads\_Distributed



Lanciare l'analisi cliccando su 'Run now' e verificare la deformata e i diagrammi del taglio e momento



Guardo le tabelle per vedere il valore esatto dello spostamento verticale: Display\_Show tables\_Analisys results\_Joint Displacement  
E notiamo come il valore calcolato da SAP (2,9mm) sia pressoché identico a quello calcolato a mano ( 2,8 mm).

The screenshot displays the 'Joint Displacements' table in SAP software. The table has the following structure:

Joint	Output Case	Case Type	U1	U2	U3	R1	R2	R3
Text	Text	Text	m	m	m	Radians	Radians	Radians
1	peso nullo	LinStatic	0	0	0	0	0	0
2	peso nullo	LinStatic	0	0	-0.00296	0	0.000029	0
3	peso nullo	LinStatic	0	0	0	0	-0.002198	0

The table is displayed in a window titled 'Joint Displacements' with a menu bar (File, View, Format-Filter-Sort, Select, Options) and a 'Units: As Noted' dropdown. The status bar at the bottom indicates 'Ready', 'Start Animation', and 'GLOBAL KN, m, C'.